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CLAIMS:

1.   A method of performing an object editing operation in a data processing system

having a display for displaying an object and also having a user input arrangement

5   including a pointer control device for providing inputs to control the location of a

pointer on the display, the data processing system also having a processing device

programmed to receive and respond to inputs entered through the user input

arrangement and provide an output for controlling the display, the method including

the steps of:

10   (a)   receiving an edit function input entered through the user input arrangement,

the edit function input defining an edit operation to be performed by the data

processing system;

(b)   identifying a target in response to the edit function input, the target

comprising an object appearing on the display as specified by proximity to

15   the pointer at the time the edit function input is received;

(c)   determining a state of the target; and

(d)   applying the edit operation to the target if the state of the target indicates that

the edit operation is not currently applied to the target.

2.   The method of Claim 1 wherein the object comprises a text object a the

predetermined minimum level of granularity defines the amount of text for the

target to be a single word.

5   3.   The method of Claim 1 further including the steps of:

(a)   identifying a first target string for the target if the state of the target indicates

that the edit operation is currently applied to the target, the first target string

comprising a first string of additional object elements which includes the

target;

10   (b)   determining the state of the first target string; and

(c)   applying the edit operation to the first target string if the state of the first

target string indicates that the edit operation is not currently applied to the

first target string.

15   4.   The method of Claim 3 wherein the object comprises text and a predetermined

minimum level of granularity defines the amount of text for the target to be a single

target word, and wherein the first target string comprises a sentence which includes

the target word.

20   5.   The method of Claim 3 further including the steps of:

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(a)   identifying a second target string for the target if the state of the first target

string indicates that the edit operation is currently applied to the first target

string, the second target string comprising a second string of additional

object elements which includes the first target string;

5   (b)   determining the state of the second target string; and

(c)   applying the edit operation to the second target string if the state of the

second target string indicates that the edit operation is not currently applied

to the second target string.

10   6.   The method of Claim 5 wherein the object comprises text and a predetermined

minimum level of granularity defines the amount of text for the target to be a single

target word, and wherein the first target string comprises a target sentence which

includes the target word, and wherein the second target string comprises a

paragraph which includes the target sentence.

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7.   The method of Claim 5 further including the steps of:

(a)   identifying a third target string for the target if the state of the second target

string indicates that the edit operation is currently applied to the second

target string, the third target string comprising a third string of additional

20   object elements which includes the second target string;

(b)   determining the state of the third target string; and

(c)   applying the edit operation to the third target string if the state of the third

target string indicates that the edit operation is not currently applied to the

third target string.

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8.   The method of Claim 1 further including the step of undoing the edit operation to

the target if the state of the target indicates that the edit function is currently applied

to the target.

10   9.   The method of Claim 1 wherein the step of receiving the edit function input

comprises receiving input data from a keyboard associated with the user input

arrangement.

10.   The method of Claim 1 wherein the step of receiving the edit function input

15   comprises receiving input data from the pointer control device included in the user

input arrangement, the input data from the pointer control device including a switch

signal from a switch included in the pointer control device.

11.   A program product for performing an editing operation in a data processing system

20   having a display for displaying an object and also having a user input arrangement

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including a pointer control device for providing inputs to control the location of a

pointer on the display, the data processing system also having a processing device

for executing the program product, the program product being stored on a computer

readable medium and including:

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(a)   input program code for receiving an edit function input entered through the

user input arrangement and for associating the edit function input with an

edit operation to be performed by the data processing system;

(b)   target identifying program code for identifying a target in response to the

edit function input, the target comprising an object appearing on the display

10   as specified by proximity to the pointer at the time the edit function input is

received;

(c)   state checking program code for determining a state of the target; and

(d)   operation performance program code for applying the edit operation to the

target if the state of the target indicates that the edit operation is not

15   currently applied to the target.

12.   The program product of Claim 11 wherein the target identifying program code

identifies a single target word of text as the target.

13. The program product of Claim 11 further including first target string identifying program code for identifying a first target string if the state of the target indicates that the edit operation is currently applied to the target, the first target string comprising a first string of object elements which includes the target, and wherein:

   (a) the state checking program code determines the state of the first target string; and

   (b) the operation performance program code applies the edit operation to the first target string if the state of the first target string indicates that the edit operation is not currently applied to the first target string.

14. The program product of Claim 13 further including second target string identifying program code for identifying a second target string if the state of the first target string indicates that the edit operation is currently applied to the first target string, the second target string comprising a second string of object elements which includes the first target string, and wherein:

   (a) the state checking program code determines the state of the second target string; and

   (b) the performance program code applies the edit operation to the second target string if the state of the second target string indicates that the edit operation is not currently applied to the second target string.

15. The program product of Claim 14 further including third target string identifying program code for identifying a third target string if the state of the second target string indicates that the edit operation is currently applied to the second target string, the third target string comprising a third string of object elements which includes the second target string, and wherein:

    (a)   the state checking program code determines the state of the third target string; and

    (b)   the performance program code applies the edit operation to the third target string if the state of the third target string indicates that the edit operation is not currently applied to the third target string.

16. A data processing system including:

    (a)   a display;

    (b)   a user input arrangement including a pointer control device, the pointer control device for providing inputs to control the location of a pointer on the display; and

    (c)   a processor programmed to:

        (i)   receive an edit function input entered through the user input arrangement;

(ii)   identify a target in response to the edit function input, the target

comprising an object appearing on the display as specified by

proximity to the pointer at the time the edit function input is

received;

(iii)   determine a state of the target; and

(iv)   apply an edit operation to the target if the state of the target indicates

that the edit operation is not currently applied to the target, the edit

operation comprising an operation defined by the edit function input.

17.   The data processing system of Claim 16 wherein the processor is further

programmed to:

(a)   identify a first target string for the target if the state of the target indicates

that the edit operation is currently applied to the target, the first target string

comprising a first string of additional object elements which includes the

target;

(b)   determine the state of the first target string; and

(c)   apply the edit operation to the first target string if the state of the first target

string indicates that the edit operation is not currently applied to the first

target string.

18.   The data processing system of Claim 17 wherein the processor is also programmed

to:

(a)   identify a second target string if the state of the first target string indicates

that the edit operation is currently applied to the first target string, the

second target string comprising a second string of additional object elements

which includes the first target string;

(b)   determine the state of the second target string; and

(c)   apply the edit operation to the second target string if the state of the second

target string indicates that the edit operation is not currently applied to the

second target string.

19.   The data processing system of Claim 18 wherein the processor is also programmed

to:

(a)   identify a third target string for the target if the state of the second target

string indicates that the edit operation is currently applied to the second

target string, the third target string comprising a third string of additional

object elements which includes the second target string;

(b)   determine the state of the third target string; and

(c)   apply the edit operation to the third target string if the state of the third

target string indicates that the edit operation is not currently applied to the

third target string.

20.   The data processing system of Claim 18 wherein the target comprises a single target

word, the first target string comprises a target sentence including the target word,

and the second target string comprises a paragraph including the target sentence.